



THE BEST OF

JAWBONE'S BIG * J

JETMAN'S JOYRIDE OVER RIO

PLUS: WHY WE NEED FATTER LAPTOPS



** THE BATTLE FOR SMARTPHONE DOMINANCE CONTINUES **

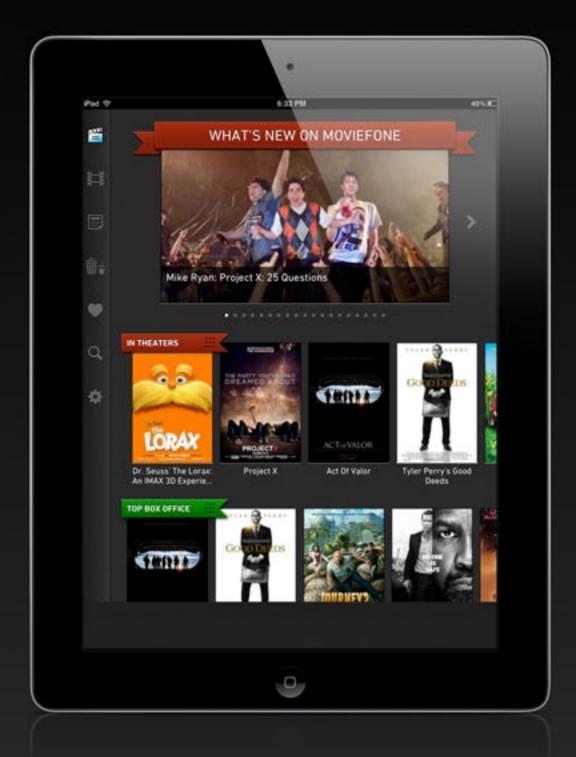






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DISTRO ISSUE #40 05.11.12

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CTIA Fizzles and the Xbox Drops to \$99*

Editor's Letter

It's a show week and so you might expect there to be a massive amount of news to wade through — but you'd be wrong. It's CTIA, which took place over the past few days in New Orleans, and our team of on-site editors spent much of the week wondering why this or that company had skipped the show altogether. The answer is that some expos are losing their importance as bigger

manufacturers opt to host their own parties, where they can own the show and the guest list.

But there was of course some news out of CTIA, like MasterCard launching its PayPass Wallet Services. Something of a competitor to Google Wallet, it too enables virtual replication of credit cards so that you can pay via NFC at any of the thousands of PayPass-enabled terminals around the US, but Master-Card is fleshing out its offerings with online payments and even an API so that developers can cook payments right into their apps. The service is scheduled to launch in the third quarter of this year, which as I look at my calendar I realize is disconcertingly only a few months away.

So, while CTIA didn't rock any-



one's world this week, there was plenty to talk about elsewhere, like Microsoft releasing an Xbox 360 that costs just \$99. Yes, an Xbox for less than a hundred bucks that also includes one very big asterisk. To get a console that cheap you need to sign up for two years of Xbox Live at a cost of \$14.99 monthly, considerably more than the \$5 per month you'd normally pay if you sign up for 12 months.

Now we of course did the math on this deal and if you go the full duration of the program you're paying about \$360 in monthly fees alone, on top of the \$99 console (which otherwise costs \$199). Not exactly a great deal, but cancel before your 24 month contract is up and you're looking at an early termination fee of up to \$250, which makes things even less appealing.

The shuffling of deck chairs at RIM continued this week with the appointment of two new corporate officers. Kristian Tear, formerly of Sony Mobile Communications, is stepping into the role of COO while Frank Boulben has the difficult task of taking over as chief marketing officer. Gentlemen, we salute you.

The chief officer over at AT&T, meanwhile, sighed, shook his head and wished that his companyhadn't been quite

I look forward to the next round of Lithebooks, Slinkybooks and other euphemistically anorexic tomes as other manufacturers try to differentiate.

so *giving* with unlimited data when it launched the iPhone, saying: "Every additional megabyte you use in this network, I have to invest capital." He also pointed out that services like iMessage are doing nothing but hurting his business.

Sprint's investors seem to be having similar doubts, with CEO Dan Hesse taking a pay cut to appease those who think \$15.5 billion was *perhaps* a bit expensive to get the iPhone. The \$3.25 million Hesse is giving up looks paltry by comparison to that figure — and to the \$863 million the company lost during that same quarter.

HP beat us over the head with a huge slew of new products this week, most interesting being a series of laptops. Some fit into the ultra-trendy Ultrabook category, like the Elitebook Folio 9470m and the Envy Spectre XT, the latter thankfully ditching the glass-clad exterior of its spectral predecessor, both offering new Ivy Bridge processors. But, not happy with one category to fill, HP is creating a new one: Sleekbooks, or thin and light laptops that don't quite

meet Intel's Ultrabook criteria. I look forward to the next round of Lithebooks, Slinkybooks and other euphemistically anorexic tomes as other manufacturers try to differentiate.

Fisker has had no shortage of problems getting its Karma series hybrid car to market and, now that it's there, the problems just keep coming. A new owner in Sugar Land, Texas had his car go up in flames while parked in his garage. Sadly the fire took most of the house with it, but thankfully there were no injuries. The local fire marshal has concluded that the two-week-old car was indeed to blame, leaving only the litigation and recall phases to come.

In better EV news, Toyota finally put a price on the RAV4 EV that it's been trotting around for years. The Teslapowered SUV with a 100-mile range will cost just short of \$50,000 when it goes on sale later this summer. It'll be available only in California, at least initially, but at a price like that it's hard to see it finding much success there or anywhere.

In this week's Distro we bring

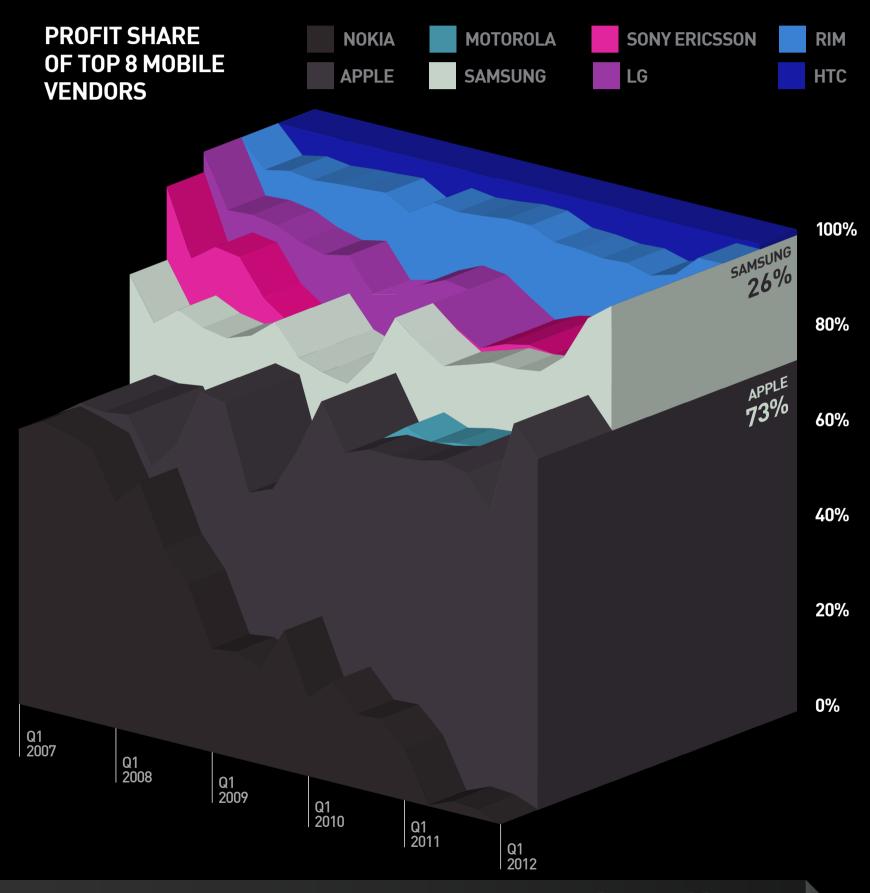
you our full review of HTC's One X, our favorite Android phone of the moment. But, we also have our fully detailed preview of Samsung's Galaxy S III, a device that could take that crown when it releases later this summer. We also have a review of Sprint's (rather tardy) Galaxy Nexus and the new, economysizedJawboneBigJambox.Ross Rubin makes the case for dedicated media players in Switched On, Ludwig Kietzmann explores the pitfalls of big franchises in Reaction Time and Darren Murph will tell you why laptops should have a little more to love. Finally, Square's Bob Lee submits to the Q&A treatment. Don't worry, we won't be asking you any questions. We just ask that you enjoy.

TIM STEVENS
EDITOR-IN-CHIEF,
ENGADGET

Correction: In Atari Icon (Issue 39) Nolan Bushnell referred to *Asteroids* as the first Atari microprocessor game. Many Atari microprocessor games had appeared before that game's release. We also mistakenly referred to Infogrames as InfoROMS.

Apple and Samsung Occupy the 99 Percent... of Phone Profits

Financial maven and industry analyst Horace Dediu of Asymco has found that between the top eight mobile phone vendors, Apple and Samsung share 99 percent of the total spoils. Of RIM, LG, Sony (Ericsson), Motorola, Nokia and HTC, only the latter made a profit — claiming that left over one percent. The remaining six all recorded losses for the quarter, Mr. Deidu adding that several of those companies are carrying feature phone businesses that they should shed before they become an albatross around their neck. — Daniel Cooper



AND SMARTPLAYERS FOR ALL

Switched On



BY ROSS RUBIN

A few weeks ago, Switched On noted the challenges that even wildly popular, highly penetrated devices such as MP3 players and portable GPS devices have faced in the era of the converged device. Some of these devices, such as digital cameras, still hold on because of genuine advantages such as better image quality or optical zoom. For other devices, though, such as MP3 players and portable GPS devices, the grim news is that

one of the main reasons consumers use them is to save smartphone battery life.

The high adoption of iPads by iPhone users has shown that there's room in people's lives for multiple convergent devices that use the same operating system. The iPod touch by far the most popular smartplayer - has become popular among those who want the features and apps of an iPhone but don't want to pay for a cellular data plan. The similarities between the design of the iPhone and iPod touch virtually reduces the buying of an iPod touch to that of a backup battery for an iPhone user. It is more of an iPhone substitute than complement. And at \$200, it may cost as much as an iPhone's subsidized price. In contrast, there may be more opportunity for the smartplayer as a second device among Android users where there's more variation and tradeoffs among handset features. And here, paradoxically, a device with lower-end specifications may be more desirable in that role than, say, the Galaxy Player 5.0 that Samsung released last year.

Take, for example, the Galaxy Player 3.6 that Samsung recently released. Its screen size is about the same as an iPhone's, but it's a more portable alternative to a behemoth such as the Galaxy Nexus or, of course, the Galaxy Note. The device is a suitable alternative to that of a data-sucking smartphone for activities such as playing games, listening to music that has been

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service at The NPD Group.
Views expressed in Switched
On are his own.

Using a device such as the Galaxy Player outside of an area blanketed in WiFi is like a throwback to the sync-and-go era of PDAs.

sideloaded, downloaded or cached via apps such as TuneIn Pro, Rhapsody or Slacker, catching up on RSS feeds or Instapaper. Listening to Audible audiobooks, creating notes or voice recordings (such as at a lecture or meeting), taking Instagram or Facebook-quality photos (at least outdoors as the device has no flash), or jotting items into an organization app such as Evernote or Wunderlist for later syncing. Indeed, using a device such as the Galaxy Player outside of an area blanketed in WiFi is like a throwback to the sync-and-go era of PDAs.

Unlike the iPod touch, the Galaxy Player supports GPS, but while it may be a fine alternative to an MP3 player, there are not many offline navigation apps available for Android. One of the few Android third-party alternatives to Google Navigation from Navigon is not compatible with the Galaxy Player. On the other hand, Samsung is also reaching out to owners of its large-screened smartphone by enabling the Galaxy Player to act as a Bluetooth handset. That's right, if putting your Galaxy Note up against your face feels a bit like napping on a glass pillow, you can keep the pen-equipped Note in your (man-)purse and use the Galaxy Note to actually make your calls. Like a Bluetooth headset, this also has the advantage of letting you use the phone's screen as you talk.

At \$150, the Galaxy Player is more expensive than most external batteries, but you probably wouldn't worry quite as much about it getting lost, stolen or destroyed as you might for a \$300 top-of-the-line smartphone, particularly if you don't have your email or contacts on it because you're using your smartphone for that.



Jetman's Joyride

After flying over the Grand Canyon and testing his speed against a rally car on Top Gear, self-proclaimed Jetman Yves Rossy took to the sky over Brazil's Christ the Redeemer statue on May 2nd.

AP Photo/Joe Parker, Breitling



THIN LAPTOPS ARE THE NEW MAINSTREAM, BUT WHAT ABOUT BATTERY LIFE?

Editorial



BY DARREN MURPH

Bandwagons, trains and Tranes. Can't say that these three have a heck of a lot in common in most regards, but one thing's for sure: trying to stop this trio would be a Herculean task. And so it goes with laptops — once upon a time, it was good enough to have something that resembled a portable tower, but these days, the ability to even see the chassis at all feels like a negative. I exaggerate, of course, but the proverbial race in the laptop world is hardly about price; it's about thinness. Intel's unstoppable quest to spread the Ultrabook term as far and wide as possible has led to a change in the way consumers are viewing portable machines, and Apple's devilishly thin MacBook Air certainly played a role, too. What we're left with is a very curious priority list, and I'm wondering if too many OEMs have stopped to wonder if the "obvious" is indeed the "right."

I'll be the first to confess that I love the look of thin. Samsung's Series 9 and Acer's Aspire S5 might just be two of the sexiest machines to ever be built, and Dell's original Adamo was primarily of interest due to one thing: it's jaw-droppingly thin frame. But there's a saying about putting form before function that seems to apply here, particularly when keying in on battery life. I've no doubt that the marketing and research teams for PC makers understand the

Darren holds the Guinness
World Record for being the
most prolific professional
blogger on planet Earth.
He's also an argonaut.

realities of the market place, and perhaps the average consumer really doesn't need more than four to six hours of life on a single charge. Five years ago, squeezing that much life from machines under an inch thick would've required some sort of wizardry that exists only in a rarely visited corner of West Hollywood. But today, I'm a dreamer. And I'm dreaming of a laptop with "all day battery life" — something that could be screamed from the rooftops, and honestly, something that could probably be accomplished tomorrow if our laptop options weren't on such a diet.

Let's look at the landscape. Apple's 13-inch MacBook Air measures 0.68 inches at its thickest point, and can burn the midnight oil for around five hours under what I'd consider "normal" use. HP's Envy 14 Spectre is but 0.79 inches thick, and peters out after around 5.5 hours of stressful toiling. The aforesaid Series 9 from Samsung is barely more than 0.6 inches thick, and managed just over seven hours in our rundown test. Acer's Aspire Timeline Ultra M3 checks in at around 0.8 inches thick, and mustered just over five hours in the same video rundown scenario. I could keep listing comparable machines for hours, but you get the point: thinner than an inch is the new mainstream laptop.

I'm fully aware that chubby alternatives exist — the MSI GT70 that we recently reviewed sizes up at 2.16 inches thick, but it failed to be useful after passing out at the 2.5 hour mark. The point? There has to be an in-between, and moreover, there has to be a market that would appreciate if said "in-between" were filled with somewhat thicker machines that required an AC outlet only as often as my brain requires a moment of sleep.

Imagine this: a Samsung Series 9 machine (or your thin-and-light of choice) that measures, say, 1.3 inches thick. Yes, that's over half an inch thicker than the existing build, but it's still just marginally thicker than many of the bargain-bin, \$399 PCs that you scoff at whilst thinking highly of yourself in Best Buy. While keeping the same CPU / GPU combo, there's plenty of extra room here to punch in a larger battery — in fact, it's a model that has been followed before. Motion's J3400 rugged tablet shipped with room for *two* batteries, and somehow, an

overseas knockoff vendor managed to do likewise on a KIRF MacBook. Even on the new iPad, there's more battery than ever before beneath the silver rear — a necessary addition to maintain the approximate 10 hours of expected in-use life with the addition of the Retina display and an LTE module.

Look, I know that what I'm asking for here is appalling in at least two ways. For one, it'll be harder to sell a thicker (read: "uglier") laptop. And two, prices of these would have to rise to account for the extra battery power. But I, for one, would be willing to pay the premium. Is it really so hard to think about how much more wonderful freshly cut grass would smell and how much more tolerable gridlock would be if I had a 1.3-inch Series 9 that would last a solid day without needing rejuvenation? What if I had a laptop that could last nearly a week with an average amount of on-and-off usage? What if I had a MacBook Air that could outlast the iPad? What if the computer-using generation could go about their lives without fear of their laptop fading to black mid-email in the airport? What if "do I have enough juice?" was swapped for "there's surely enough life left!" as the prevailing thought during laptop use?

I also recognize that efficiencies are increasing across the board, and we're doing more with a 2200mAh battery today than we did a decade ago. And eventually, perhaps, efficiencies alone will lead to a 1-inch laptop that can be used for a full day before petering out. But Ford didn't wait for naturally aspirated engine technology to improve enough to put 624 horses in a Mustang; it tapped a company called Whipple and bolted its way to glory. I think the world — or, at least a select part of it with the right amount of disposable income — is ready for an all-day laptop, and I think it's willing to deal with a bit more heft in order to get it. Or, you know, maybe it's just another episode of "All I Want For Christmas" from your friends at Engadget.

(At least we're giving you more than a few hours to make it happen this time.)

>> HANDS-ON

Our firsthand impressions of just-announced and soon-to-be-released devices



HTC DROID INCREDIBLE 4G LTE FOR VERIZON



PRICE N/A
AVAILABILITY
Coming Soon

THE BREAKDOWN A refreshed version of the Incredible 2, with a much better processor and notable bumps in specs.

This handset didn't surprise anyone when it was officially announced, but we're happy to spend time with the HTC Droid Incredible 4G LTE, regardless.



After catching glimpses over the past few months, we had a good idea of what to expect: Big Red's latest LTE device will have Ice Cream Sandwich dressed in Sense 4, a 4-inch Super LCD qHD panel, a 1.2GHz dual-core Snapdragon S4 (Krait), 1,700mAh user-removable battery, microSD and

an 8MP BSI f/2.2 camera. Aside from the Sense firmware, the Incredible 4G LTE has little in common with its cousins, the One X and One S.

SUPERTOOTH DISCO 2

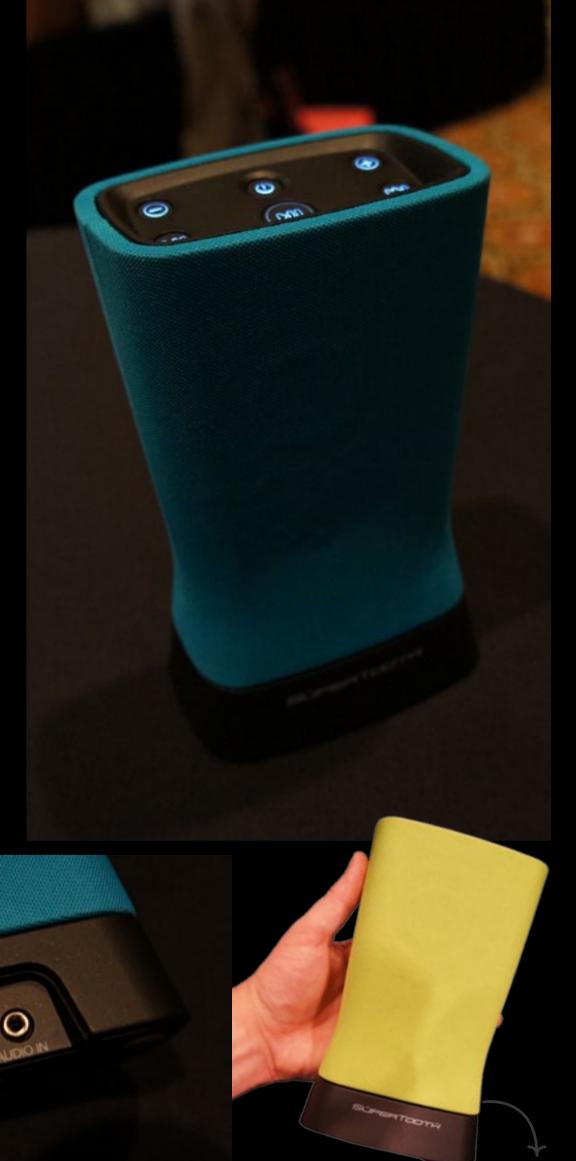


PRICE \$99
AVAILABILITY

Mid-May

THE BREAKDOWN Another Bluetooth speaker is out to unseat Jambox and it packs quite the punch for \$99.

Move over Jambox, there's a new portable audio contender entering the market. The Disco 2 is Super-Tooth's smaller sequel to its 0.G. 28 watt powerhouse of the same name and a direct threat to the niche market occupied by Jawbone. Housed in a colorful hourglassshaped design, this rechargeable speaker connects over Bluetooth to your device, outputting 16 watts of 360-degree sound through two speakers and a subwoofer. If you feel the need, an additional unit can be paired up for a fuller stereo effect. Judging from its performance on the noisy showroom floor, however, you'd probably be fine with just one.









HUAWEI 10-INCH MEDIAPAD



PRICE N/A AVAILABILITY Q2 2012

THE BREAKDOWN

Huawei's 10-inch Media-Pad sports a gorgeous screen and high-quality build, but its unfinished software could be to blame for performance issues.

We finally got a chance to take Huawei's 10inch tablet for a spin at CTIA and despite it running development-stage software, we came away impressed. The 10-inch 1920 x 1200 IPS display is one of the most gorgeous screens to ever grace a tablet. The primarily aluminum body feels great in the hand, and the quadcore processor handles most tasks effortlessly, though we did experience occasional hiccups. At 8.8mm thin it weighs in at just 13 ounces, while packing a 6,600mAh battery. It provided varied results in our benchmark rundown, but that could be the result of an unfinished OS.



AT&T SAMSUNG FOCUS 2



PRICE \$50

AVAILABILITY

May 20th

THE BREAKDOWN It faces stiff competition from the likes of the Lumia 900, but the Focus 2 could be just right for those looking for a smaller display and LTE.

The latest addition to AT&T's Windows Phone lineup offers a 4-inch Super AMOLED WVGA display, a 1.4GHz CPU with unspecified RAM, 5MP rear-facing camera capable of recording 720p HD video, a VGA cam on the front and LTE connectivity. Compared to its Windows Phone cousins from Nokia and HTC, it felt downright tiny and at

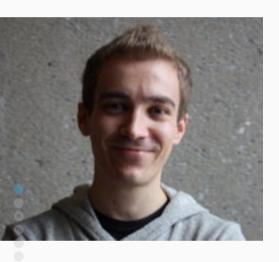
4.3 ounces, nice and light, but its 11.98mm thickness proved disappointing. It won't be a power user's go-to phone, but for those who enjoy a Windows Phone with a smaller display and were disappointed in the lack of LTE connectivity on the Focus Flash, this could be the ideal handset.

Hands-On



AVENGERS, ASSEMBLE! AND PROVIDE COMMENTARY ON GAMES!

Reaction Time



BY LUDWIG KIETZMANN

Ludwig Kietzmann is the
Editor-in-Chief of Joystiq.
com. He's been writing
about video games for over
10 years, and has been
working on this self-referential blurb for about twice as
long. He thinks it turned out
pretty well.

The world of popular culture was left awestruck last week after colliding with *The Avengers*, an extravagant, unavoidable glitter ball of an asteroid. The simultaneous sequel to five popular movies, *The Avengers*, accrues a crew of incredible superheroes, including one that already claimed "incredible" as a capitalized adjective in his name. ¶ You've got the irradiated scientist who grows out of his pants and into a green behemoth, a demigod who wields both mythical hammers and perfect L'Oréal hair with equal aplomb,

a smart-ass billionaire encased in weaponized toasters, a guy with a bow, and Captain America, the patriotic straight arrow who might as well sit in the quiver of that other guy. The best part of the film is seeing how they all get along.

They do eventually, of course, because it's an entertaining arc and because together they have to navigate a spectacular gauntlet of alien invasion, non-depletable cosmic power sources and lots of other things that cost a fortune to render and / or blow up. There's an inescapable wave of critical

condescension toward the audience whenever they sign up for unrealistic, "dumb" thrills en masse, but the reality is that certain movies — just like games — can't exist unless they spend their money in the right places. In *The Avengers*, which essentially sneaks in a witty geek comedy when nobody's looking, you can see the dollars whiz by on the screen every second. Also, every dollar is on fire.

You can level the same observation — not complaint, necessarily — at the *Call of Duty* franchise, which is wedged in a rut of its own expensive creation. Each annual shooter has a burgeoning budget fueled



by what came before. It must pack in more content, more exhilarating scripted sequences, more explosions and more demonstrable justification that it's better than the last one. It's not really clear if that upward curve exists because the publisher can afford it, or because it can ill afford to abandon it. Ironically, it's a boom that's holding back *Call of Duty*'s fundamental advancement.

Much like *The Avengers*, which wouldn't be feasible or sustainable had other movies not created a pattern of familiarity and bigger-and-better growth among fans, the next *Call of Duty (Black Ops 2)* will almost certainly be praised and damned for its adherence to the formula. We'll bask in the glow of its glorious pyrotechnics and mastery of spectacle, and then wonder why it's so clearly made for the (condescension alert!) lowest common denominator.

But perhaps that's not giving full credit to the sophistication at play, even if we suspect it's not in play. Yes, these games (and movies) serve a clear purpose, one that's as easy to identify as it is to dismiss. There's still thought, artistry and hard work to it, and I think it's silly to assume that your enjoyment of a well-constructed spectacle, presented in a visual medium, automatically robs you of the ability to

4 NEW RELEASES FOR THE WEEK OF MAY 11TH

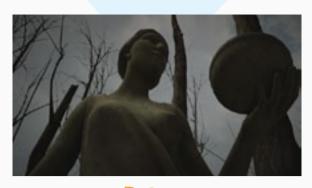


Minecraft
(Xbox Live Arcade) \$20

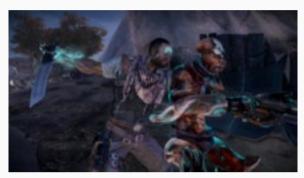
discern between good and bad. The crucial bit, however, is to notice exactly how these games are really becoming like movies. It's not that they're huge investments — it's that money is being spent on a critical path. The only way you miss the most expensive shots in *The Avengers* is by nodding off or having a poorly timed bathroom break.

And just like that, Call of Duty (and even a game like Half-Life) forges a linear adventure and commandeers your viewpoint — sometimes in a subtle way — to make sure its huge expenditure of resources finds reward in a set of eyeballs. It's a matter of practicality with these ginormous games, and it makes me question whether the most powerful elements of the medium, such as the tension and doubt created by traversing one route over another, can survive in the face of more elaborate presentation and frugal accounting. Will games like Mass Effect be considered too impractical five years from now? Who can afford to spend money on scenes that might not play to every audience?

Well, maybe *Call of Duty* can. The monolithic franchise is in a position to experiment too, and this year's game, *Black Ops 2*, is toying with alternate missions and character paths resulting from player interaction. I don't expect the divergence to be very deep, but it's a risky move in a franchise that doesn't need to take any. I'd like to be proven wrong here, and come back in 2015 to tell you how different *Call of Duty 12* is – especially when compared with *The Avengers 2*.



Datura (PlayStation Network) \$10

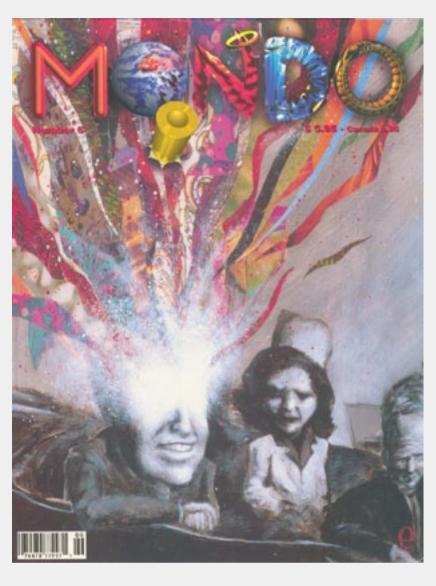


Starhawk (PlayStation 3) \$60



Warlock - Master of the Arcane (PC) \$20

Mondo 2000 History Project





Two years ago, R.U. Sirius (a.k.a. Ken Goffman)

launched a Kickstarter project to produce an Open Source History of Mondo 2000, the cyberculture magazine that he founded and published when words like "cyberculture" were used to describe such things. That's still in the works, but he's now also recently started publishing some bits of *Mondo* 2000's history on his website, Acceler80r, complete with some added commentary and other bonuses — like an interview conducted during the Cyberpunk Handbook book tour. Additional material is promised throughout the month of May, but there's already plenty to keep you busy for a while, not the least of which is a conversation between David Byrne and Timothy Leary.

AROUND THE WEB

1859's "Great Auroral Storm" — The Week the Sun Touched the Earth

by Matthew Lasar Ars Technica



A look back, way back, to the massive auroral

storm that hit the planet in 1859 — an event that was strong enough to power telegraph lines for a short time (and shock some operators), and which could wreak considerable havoc on communications were one to occur today.

How Amanda Palmer Built an Army of Supporters: Connecting Each and Every Day, **Person by Person** by Amanda Palmer

TechDirt



Another story linked to Kickstarter, this one

an account from musician Amanda Palmer on her own recent success to fund her new album /tour/book project which, as of this writing, had recently crossed the half-million mark with weeks still to go.

Everyone has Been Hacked. Now What?

by Kim Zetter Wired



Another mustread piece on security from

Wired's Kim Zetter (whose Stuxnet story we've previously featured), this one looking at the fallout from what Zetter describes as a security bubble that's finally burst.

The Perfect Milk **Machine: How Big Data Transformed the Dairy Industry**

by Alexis Madrigal The Atlantic



Further evidence that "Big Data"

knows no bounds, this exhaustive piece from Alexis Madrigal looks at how data-driven projects have changed the American dairy industry and deemed a cow named Badger-Bluff Fanny Freddie to be the 'perfect milk machine."

Recommended Reading



Review

HTC One X for AT&T

Is AT&T's One X really better than the global model? Yes. If you can live with the carrier's software tweaks, this is the best subsidized Android phone in the US today.

BY MYRIAM JOIRE

After last year's scattered lineup of products, HTC's been going through a bit of a renaissance lately thanks to the One X, One S One V — a beautifully focused trio of phones that run the company's new, lightweight Sense 4 skin on top of Ice Cream Sandwich. Hot on the heels of T-Mobile's One S comes AT&T's One X, which is launching May 6 for \$199 on contract. The reworked device gains LTE and drops NVIDIA's

quad-core Tegra 3 chip for a dual-core Snapdragon S4. So, does this brain transplant make it a better or worse proposition than the global One X?

It takes more than a casual glance to tell AT&T's One X apart from its matte white foreign twin. The only telltale sign is HTC's logo giving way to the carrier's brand on the glass between the earpiece and the display. While both are striking handsets carefully crafted from the same



It takes more than a casual glance to tell AT&T's One X apart from its matte white foreign twin.

thin (8.9mm), machined polycarbonate unibody, AT&T's version is perhaps a smidgen taller and heavier despite the official numbers (134.36mm and 130g). There are other subtle changes: the camera pod contains a slightly larger plastic (not aluminum) piece, and the five contacts on the back don't line up, leading us to believe these devices use incompatible docks.

The phone retains the same gorgeous 4.7-inch HD (1280 x 720) Super LCD 2 (non-PenTile) screen protected by Gorilla glass, but the innards have changed significantly. NVIDIA's quad-core 1.5GHz Tegra 3 chip's been replaced with Qualcomm's dual-core 1.5GHz MSM8960 Snapdragon S4 processor, which is similar to the MSM8260A found in the One S but adds that important dual-band (1700 / 700MHz) LTE radio. While the 1GB of RAM carries over, built-in storage is down to 16GB from 32GB (with 12GB available to the user). This is particularly vexing since there's no microSD card slot on the One X.

Performance and Battery Life

Comparing a carrier-sanctioned device to its SIM-free counterpart often results in disappointment. Processor swaps and operator-imposed software tweaks don't usually mix well when it comes

ead ead	103.77	48.54	103.88
ead	214.53	150.54	222.22
	58.6	59.5	8.08
	58.7	47.6	61

HTC ONE X (GLOBAL)

4,906

1,617

1,772.50

HTC ONE X (AT&T)

5,183

2,350

1,709

Notes: 1 Lower numbers are better

SunSpider 0.9.11 (ms)

BENCHMARK

At \$199, this is the best subsidized Android phone in the US today.

to performance (AT&T's Galaxy Note comes to mind). Well, you can rest easy: AT&T's One X bucks this trend and feels just as blazingly fast as the global model, if not brisker. In our benchmarks it beat the Tegra 3 variant in almost every test, with scores matching the Snapdragon S4-equipped One S in each category. All told, it's quite possibly the speediest handset we've ever played with.

Even with LTE enabled, battery life is noticeably better on AT&T's One X than on the foreign version. This was a sticking point in our original review, so we're

extremely pleased with the improvement. We recorded eight hours and 55 minutes in our video loop rundown test with the screen set to 50 percent brightness — most folks will have little trouble getting a full day's use from the 1,800mAh cell. Call quality was decent, but LTE performance exceeded our expectations with peak speeds of 35.7Mbps down and 23.5Mbps up (!) — the fastest results we've ever recorded on an LTE device.

HTC ONE S (GLOBAL)

5.053

2,452

1,742.50

SAMSUNG GALAXY NOTE (GLOBAL)

3.854

64.3

95.66

56.6

32.8

901

2,902

Camera

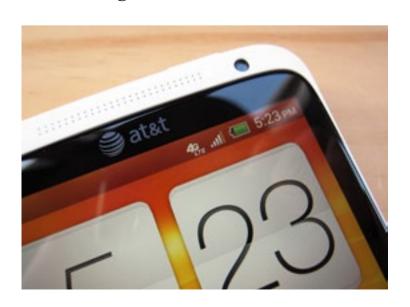
On the camera front, AT&T's One X follows in the footsteps of its global stablemate (and the One S) with the same impressive 8-megapixel shooter. The wide aperture f/2.0 autofocus lens, high-quality BSI sensor and super-fast processing combined with features like HDR, panorama and real-time filters provide an unrivaled imaging experience — it even captures photos and 1080p / 30fps video simultaneously



(with full AF and stereo audio). The lack of a proper dual-detent shutter button is the only blatant omission.

Software

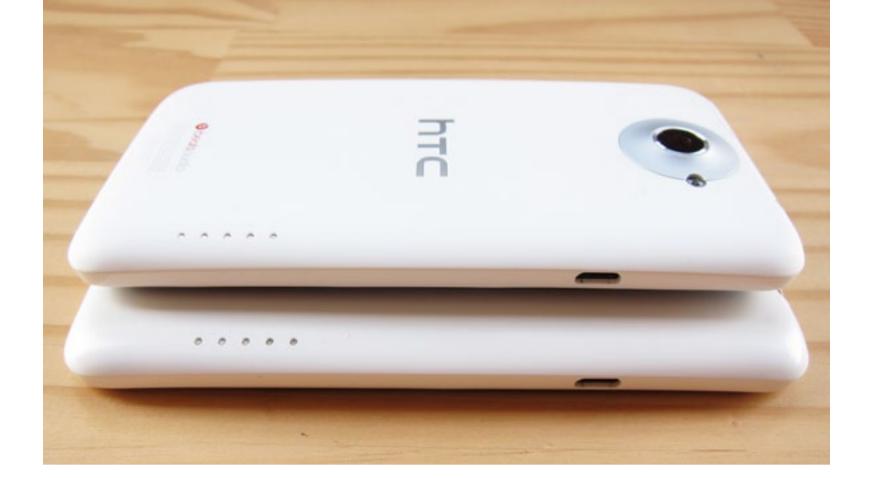
Both AT&T's One X and its unlocked cousin run Ice Cream Sandwich (Android 4.0.3, in fact) along with HTC's new streamlined Sense 4 UI. We're happy to report the carrier's managed to avoid diluting HTC's vision by keeping customizations to a minimum. AT&T's start-up animation is far less tacky and annoying than what we saw on T-Mobile's One S, but here again the network status indi-



cator's been adjusted to display 4G LTE for LTE, 4G (instead of H) for HSPA+ and E for EDGE. The word AT&T always appears in the left of the notification bar, wasting valuable space.

In addition to Google and HTC's usual software, you'll find a dozen or so preinstalled apps on the phone. The good news is that half of them are removable. The bad news is that several useful apps that exist on the foreign version — such as Voice Recorder, Polaris Office, FM Radio, Flashlight and Dropbox — are missing from AT&T's One X. The operator-specific crapware includes AT&T Code scanner, AT&T FamilyMap, AT&T Navigator (why?), AT&T Ready2Go, Device Help, Live TV and myAT&T. Amazon Kindle, MOG Music, Top HD Games, and YPMobile complete the package.

As with other AT&T devices, the hotspot functionality is crippled and will "call home" to check for a tethering plan before turning on — this even after unlocking the handset and inserting a SIM from another



carrier. There's also no AWS support for HSPA+ in the baseband out of the box. On the plus side, NFC was left untouched and Android Beam works as expected.

Wrap-Up

By now you're probably asking yourself, is AT&T's One X really better than the global model? Yes, absolutely - assuming you can live with the carrier's software tweaks and bloatware. At \$199, this is the best subsidized Android phone available in the US today. It arguably dethrones Samsung's mighty Galaxy Note as AT&T's flagship device by combining Ice Cream Sandwich, a faster processor and a more efficient LTE radio. The only alternative, if you can afford it, is to import the unbranded, unlocked Canadian version of the One X, which is also compatible with AT&T's LTE bands. d

Myriam was born wearing combat boots and holding a keyboard; moments later she picked up a soldering iron. She's been stomping, typing and hacking ever since.

BOTTOMLINE

HTC (AT&T)
One X

\$199 on contract

PROS

- Amazing screen
- Fantastic camera
- Good battery life
- Impressive performance
- Sense 4 is unobtrusive

CONS

• Carrier bloatware is annoying

Is AT&T's One X really better than the global model? Yes. If you can live with the carrier's software tweaks, this is the best subsidized Android phone in the US today.







Review

Sprint Galaxy Nexus

The Galaxy Nexus remains one of the best Android phones on the market, and this version, in particular, includes Google Wallet. Still, the battery life is relatively short, and early adopters will have to wait for Sprint's LTE network to go live.

BY TERRENCE O'BRIEN

Third time's a charm...

Three's a crowd...

She's once, twice, three times a lady Nexus...

Three's a magic number...

Good things come in threes... or is that sneezes?

Okay, so maybe there isn't anything clever we can say to get you hooked, but do we really need to lure you in at this point? The Galaxy Nexus is, arguably, not only one of the best Android phones on the market, but one of the best phones, period. So, there's no reason to expect the Sprint variant (\$199 on contract) would be anything short of incredible. Still, there's only one way to find out. Follow along as we put the newest member of the Nexus family through its paces and see how it stacks up against its Verizon and unlocked siblings.

Hardware

Internally, the Sprint edition of the Galaxy Nexus is more or less the same as Big Red's. The radio may work with different

Cosmetically, there are some slight differences from its two predecessors. Sure, it's the same size and weight as its LTE brother (which makes it a hair thicker and heavier than the GSM version), but it's sporting a slightly darker finish that has just a touch less sheen. The backplate also has a slightly different texture to match the more matte appearance. It still has a series of depressed diamonds in a crosshatch-like pattern, but the "weave" is much tighter, resulting in a smoother and softer feel in the hand. And, of course, there's the Sprint logo which, while no larger than its equivalent on the Verizon version, stands out much more thanks to the darker backdrop.

Of course, no review of the Galaxy Nexus would be complete without mention of the amazing screen. After setting eyes on the HTC One X, the Super AMO-



Internally, the Sprint edition of the Galaxy Nexus is more or less the same as Big Red's.

LED panel on the GNex draws slightly less awe, but it's still an impressive display. We do find the auto brightness to be a tad aggressive and, if you're looking for it, you can notice the graininess that detractors claim makes the PenTile subpixel layout the worst thing since Pol Pot. Honestly, most of us Engadget editors aren't too bothered by the noise, but once you do notice it, the smear of pixels becomes almost impossible to ignore. There is some mild, though noticeable variation in the color temperature between the various versions of the phone, with dark grays taking on a purple hue on the Sprint edition, particularly with the brightness turned down.

Software

Have you not had your fill of us rambling on about the beauty of Ice Cream Sand-

BENCHMARK	SPRINT GALAXY NEXUS	VERIZON GALAXY NEXUS	GSM GALAXY NEXUS	AT&T HTC ONE X
Quadrant (v2)	1,988	1,994	1,993	5,183
Linpack single-thread (MFLOPS)	44.4	44.5	42.9	103.8
Linpack multi-thread (MFLOPS)	72.8	74.4	69.4	214.5
NenaMark1 (fps)	52.0	52.0	53.0	58.6
NenaMark2 (fps)	24.9	24.0	24.3	58.7
SunSpider 0.9.1 ¹ (ms)	1,922	2,256	1,985	1,709

Notes: 1 Lower numbers are better

wich? Really? Well, okay, if you insist: It's really quite amazing. The whole UI, with its stark contrast, gray gradients and sharp angles finally ties Android together in a surprisingly beautiful and sleek package. In fact, every time we fire up stock ICS, we curse the manufacturers who have the gall to deface such a gorgeous and thoughtful design with their bright, cartoonish hues and faux chrome.

The Sprint Galaxy Nexus is no exception, and in this case, carrier customizations are kept to a delightful minimum. None of the usual Sprint fare, like NASCAR, Music Plus, NBA Mobile or TeleNav are on board. Still, that's not to

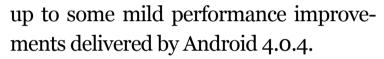


say there aren't any wrinkles here. See, unlike its brother on Verizon, this Nexus comes loaded with Google Wallet. With four Wallet-compatible phones now in its ranks, this pretty much makes Sprint the official carrier of the payment system. And, as a bonus, Sprint is handing out a \$40 credit just for signing up for Google Wallet, and that's in addition to the complimentary \$10 you already get.

Performance

Again, in the context of the One X (or the One S, for that matter), the Galaxy Nexus is no longer the jaw-dropper it once was. That doesn't mean it can't fly, though. Sure, in terms of pure power HTC's latest are the clear winners, but under normal usage you'd be hard pressed to notice a difference. The Sprint edition runs right in line with the GSM and Verizon Nexuses, with scores falling more or less within the margin of error. It did, however, manage to eke a small, but notable, victory on the SunSpider benchmark, which we'll chalk





Interestingly, despite running on CDMA only, it couldn't quite match the longevity of the Verizon version with its LTE radio shut off. In fact, it caved quicker than the HSPA+ model. After five hours and one minute, the 1,850 mAh battery threw in the towel leaving us wondering exactly what was going on. We suspect the primary culprit is the weak EVDO signal we were pulling in at our testing facility. With the phone struggling to stay connected it very well may have just burned through those lithium-ion cells that much faster.

Network

This, ultimately, is the dealbreaker for the Galaxy Nexus on Sprint. That may change once the carrier fires up its LTE network but, for now, you're saddled with EVDO. To make matters worse, Sprint's CDMA speeds fail to match even those on Verizon. We turned off the LTE on our Verizon handset and averaged 1.9





Mbps down and about 900 Kbps up. By contrast, the Sprint version managed just 545 Kbps down in San Francisco. And things only got worse in New York City where we drew a paltry 256 Kbps. Again, once that LTE switch gets thrown, Sprint may become the envy of all your friends, but right now, it's like choosing dial up in a broadband world.

Camera

If you didn't like the camera before, you're not going to like it now; there are no surprises hiding here. The 5-megapixel shooter on the back is the same exact one Samsung has already trotted out twice. You can certainly coax pleasant-looking

photos out of it with sufficient light, but we wouldn't recommend printing them out and hanging them in a gallery. When your surroundings get dim, expect plenty of noise in your pics. On the plus side, you still get continuous autofocus while shooting 1080p video and the zero shutter lag is every bit as impressive as it was on day one. If a high-quality image sensor isn't a priority for you when shopping for a phone you won't have any complaints here. But, if you're looking to replace a high-end point-and-shoot there are better options on the market.

Wrap-Up

What can we say about this phone that hasn't been said before? No, seriously, what? It may sound a bit glib, but the Sprint Galaxy Nexus is the same phone we've already reviewed twice, just with a Sprint logo slapped on the back. There are some minor cosmetic differences, but they don't make the phone any more or less desirable. It's still one of the best, if not the best, phones on the market. What's more, if you've got a hankering for some plain vanilla Ice Cream Sandwich, this is the only way you're going to get it. (Short of loading up a custom ROM, of course.) The big difference here is the Sprint network, which makes it the weakest link in the chain — at least until it flips its LTE network live. Here in New York, even when we could get a consistent signal, it was like we had traveled back in time. In the age of 4G, Sprint's EVDO Rev. A network simply can't keep up. But, if you're already a happy Sprint customer and want a future-proof device that will be able to take advantage of its LTE network when it launches, this is easily the best of your current options.

Terrence is too complicated and multifaceted to be reduced to pithy one liners. He's also kind of a jerk.

BOTTOMLINE

Samsung (Sprint) Galaxy Nexus

\$199 on contract

PROS

- Simple yet beautiful design
- Google Wallet onboard
- Solid performer

CONS

- Shorter battery life than other Galaxy Nexuses
- Mediocre camera performance
- Early adopters will have to wait for LTE service

The Galaxy Nexus remains one of the best Android phones on the market, and this version, in particular, includes Google Wallet. Still, the battery life is relatively short, and early adopters will have to wait for Sprint's LTE network to go live.



Preview

Samsung Galaxy S III: Hands-On with the Next Android Superphone

BY MAT SMITH

You remember that Galaxy S II? A phone so good they launched it, well, a whole load of times. But after seeing phablet cousins and LTE variants, the *true* handset sequel is finally here. And in advance of the big reveal in front of journalists and Sammy's business partners in London last week, we were given a few hours to acquaint ourselves with the new star away from the crush of the show floor.

And what did we make of it? In short, Samsung's tried to bring its Galaxy S series in line with (and in some ways, further ahead of) what its team-up with Google accomplished. It's added some new quad-core Exynos processing juice, a 4.8-inch, HD Super AMOLED screen and a handful of Galaxy S III-only features in an earnest bid to maintain its place at the top of the Android pile. So let's take a look, shall we?

Hardware

At first blush, we were a little disappointed that Samsung didn't intend to push the design envelope with its new flagship. That's not to say we were repulsed: it just looks a lot like an amalgam of all the Galaxy phones we've seen in the last year. It flies closer to the Galaxy Nexus than the Galaxy S II, with a shape and contour all too similar to Google's first Android 4.0 handset. In the hand, the 4.8-inch screen is counter-balanced by the thin bezel, resulting in a shape that is still comfortable to hold. It feels very light, a mere 133g (4.7 ounces — just a smidgen heavier than the HTC One X), and measures 8.6mm (0.34 inches) deep across its central waistline. (That's right, there's no more chin.)

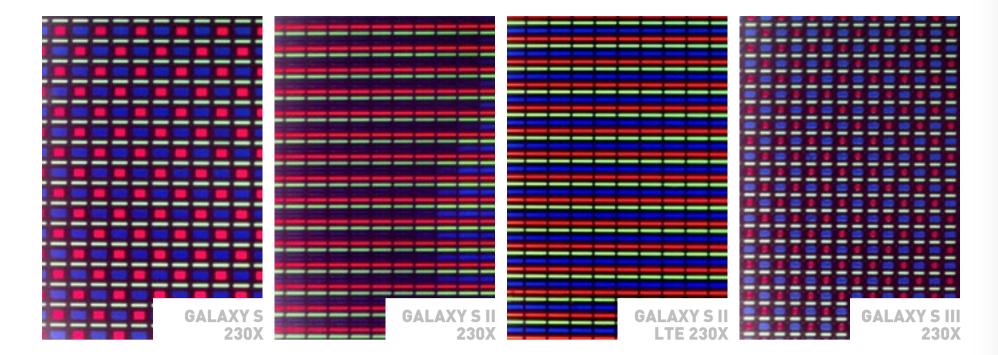
A glossy plastic coats both the front face and flat battery cover, with a particularly attractive finish on the Pebble Blue option, making it our early favorite over the Marble White. A slightly different (but still glossy) plastic follows around the edge of the device. Thankfully, the absence of a metallic chassis does nothing to hurt the feeling of quality or solidity in the build.

The phone retains the physical home button, though it's now slimmer and generally less visually obvious. It's flanked by a pair of capacitive buttons that light up and disappear, and as expected there's the camera module, flash and loudspeaker at the back.

The 8-megapixel camera looks to be very similar to what we've seen on both the Galaxy S II and Galaxy Note — which means it's a pretty capable shooter, although we're withholding judgment until we can test it out it in a mix of scenarios. Instead of shaking up the camera hardware, Samsung's pushed forward with the software interface — something we've gone into more detail here. In brief, the new camera app supports dual still and video capture, adds face tagging for existing contacts and boasts improved face identification and tracking.

The screen is a 4.8-inch HD Super AMOLED display. The bad news? The lack of a "Plus" in that name means it's PenTile, which means that pixelation is still visible despite the 306ppi density, due to the sharing of sub-pixels. The good news is that the resolution is still really good, and should suffice for





all but the most eagle-eyed — although if you're still not sure you can check out our own microscopic comparison images. It's also nice to see that the panel is cocooned in Gorilla Glass 2, besting its relative's fortified face, and it also offered great viewing angles.

The Galaxy S III's beating heart is Samsung's new 1.4GHz quad-core Exynos processor, aided by a fresh GPU that is supposedly 65 percent faster than the companion Mali 400 graphics chip on the Galaxy S II. Unfortunately, we didn't have time to give GTA III a blast, nor run our typical benchmark apps, but in any case the model we played with was not final hardware. That said, we were able to grab a quick SunSpider browser performance score of just under 1,500ms, putting the phone below HTC's polycarb-clad wonder — but lower is *better*, by the way. Whizzing around the native apps and the web browser was as pleasant as we expected, pinch-to-zoom pinged into action, while multimedia playback was effortless, irrespective of the software additions that Samsung has thrown into the mix (more on those in a second).

The phone houses a removable 2,100mAh battery, with a wireless charging option already in the works. Next to the battery and space for a micro-SIM, you'll find an increasingly rare microSD slot, whose absence was one of the main criticisms leveled at the Google Nexus, not to mention the HTC One X. This expandability sits alongside 16GB, 32GB or 64GB of internal storage, depending on which variant you buy. Other connection options here include Bluetooth 4.0, WiFi Direct, DLNA, an MHL-compatible micro-USB port and headphone socket, with NFC connected to the battery unit.

Software

Samsung's pitch to us focused heavily on the software. Pure Android enthusiasts may wince at the sight of Touch-Wiz (overlaid on top of Android 4.0.4) and from the brief time we played with the device, Ice Cream Sandwich looks



a lot like how it arrived on our updated Galaxy S II — it's not close to a stock Android experience. Instead of messing with its UI, Samsung has concentrated on specific apps — and plenty of new gesture functionalities.

Five icons populate the base of the screen, including the app drawer, while the homescreen itself has a more typical four-icon-wide berth. "Inspired by nature, designed for humans" is the winsome philosophy behind the Galaxy S III. In terms of the nature thing, this basically means that the phone comes loaded with some splashy water graphics and sound effects as well as plenty of seasonal wallpapers (including some new smart wallpapers like a background news feed).

The built-in keyboard is perfectly functional; at this screen size there's simply a greater likelihood of hitting the letter you're after. The menus and icons are all drawn in Samsung's TouchWiz style, though there are some new additions, including lock screen app shortcuts. In fact, the lock screen is where Samsung's new "intelligent" smartphone starts showing its gesture antics — part of its "designed for humans" mantra.

Once enabled in settings, you can tap and hold the screen, rotate the phone horizontally and you'll be sent to the camera app. Using the same accelerometers, a new calling function will dial whoever's contact details you have displayed when you raise the phone to your ear. Keeping with the contextual phone skills, Samsung's Smart Stay feature makes the device detect (through the front-facing camera) whether a face is looking at it in order to switch the display on or off. A little eye icon would appear on the notifica-

We saw a 10MB video file bounced between two phones in an instant.

tion bar when it was seeking out our face. Similarly, Smart Alert will display any missed calls or notifications when you pick up the phone, using the builtin accelerometer. It's the sort of magic that HTC's been using for a while, but it does help the new phone to stand out from Samsung's existing phones that are starting to blur together.

S Voice is Samsung's latest effort to introduce voice interactions to its phone series, but unfortunately it wasn't working during our briefing. We've been promised that your commands will be able to unlock the phone, control the music player and capture photos. Samsung also told us that it's already working with third-party apps to build up similar functionality for those too. Like a certain voice assistant rival, it does require a data connection because voice patterns are processed in the cloud. S Beam was in a more generous mood during our hands-on, riffing from Google's Android Beam while using WiFi in tandem with NFC to share meatier files. Beaming through NFC peaks at around 400Kbps, but that's only for pairing and smaller files — sharing media engages WiFi Direct at up to 300Mbps, according to Samsung. We saw a 10MB video file bounced between two phones in an instant. It's a very nice showpiece, although the necessity for all your S Beam sharing partners to upgrade to the Galaxy S III does inevitably taint that offering.

AllShare Play shares your media content with the big screen, while AllShare Cast will duplicate your phone's display for big-screen gaming. (Samsung told us that it's working on populating its own game hub with optimized titles, although it was still keeping quiet on any specifics.) Like S Beam, this is also broadcast through WiFi Direct to a compatible TV, rather than through DLNA — although the handset does technically still support DLNA.

A new feature that best showcases the phone's new Exynos muscle is Pop Up Play, which plays a video file on top of any other app in its own window. Playback is limited to the native media player — no YouTube greatest hits on top of your email just yet — but the window can be moved around the screen and at its fixed size covers just under a sixth of the full screen.

To recap: this is a good-looking phone, with an impressive high definition Super AMOLED screen and a processor that looks likely to spar for top spot among Android devices. However, Samsung hasn't responded to the recent trend for standout build and materials and this new flagship feels a lot like

all its older relatives; given the whole "nature" spiel, some smart new finish would have been nice. It's no doubt this lack of wow-factor hardware that has led Sammy to emphasize software progress instead, and indeed there are plenty of intriguing TouchWiz features that warrant further investigation on a finished handset — assuming you're not a vanilla Android die-hard. Glacial hardware design progress aside, if Sam-

sung manages to get these new features polished up and working flawlessly, the company might well have another best-seller. And yes, we'll take the Pebble Blue, please.

Zach Honig contributed to this report.

Mat is a contributing editor who lives in the UK. He's a Liverpool supporter who enjoys obscure Japanese gameshows.





Jawbone Big Jambox

If you've been eyeing the Jambox, but crave richer audio, we'd recommend its big brother without much hesitation.

BY JOE POLLICINO



It was back in February when we first caught wind a beefier version of Jawbone's Jambox, thanks to some less-than-stealthy ninjas at the FCC. Today it's officially here. Dubbed Big Jambox, this \$300 Bluetooth speakerphone and "smartspeaker" is unsurprisingly a supersized — yet still portable version of the new-age micro-boombox that the won us over back in 2010. Naturally, there have been some tweaks to go along with the bigger footprint, but all the core features including Jawbone's MyTalk apps and noise-cancelling know-how are in tow. Now that we've used it extensively for a few days, we're ready to answer some questions you might have. Does it follow the old adage that bigger is better? How will it fit into your lifestyle compared to the Jambox? And most importantly, is it worth the asking price?



feels less like a toy and more like a capable speaker, as if some of the original's charm was lost in the enlarging process.

Hardware

We're serious about this being a jumbosized Jambox, by the way. How big, you ask? While the Jambox measures in at about 5.95 inches in length, 2.24 inches in width and 1.57 inches in height, the Big Jambox more than doubles the overall footprint at 10 x 3.1 x 3.6 inches. It's naturally packed on some heft as well, weighing 2.7 pounds in contrast to its .75-

pound sibling. The unit is still fairly portable despite the size increase, and this editor carried it around the house in one hand with no issues. Just like the miniature wonder, the Big Jambox features the Yves Behar design-ethic that lets it do double duty as a fashion accessory.

At a glance, you'll notice the perforated aluminum grill that wraps around the unit, which in this case features the Wave pattern. Like the Jambox, there's just enough flex that you don't have to worry about the grill denting under any pressure you might apply with your fingers. If white isn't to your liking, there are also Graphite Hex (black) and Red Dot variants — here's hoping that the Blue Wave and Black Diamond palettes available on the Jambox will eventually be brought over, too.

There's really only one key difference in the overarching design, and that's the

Using its USB connection, you'll be able do things like customize the talk button's functionality and change the tone of the various voice prompts.

Jambox has two slim slabs of hard rubber on its sides, with eight rubber feet on its bottom to keep it planted your table; this is noticeably different from the thick chunks of softer rubber found on the top and bottom of the OG Jambox. Overall, it feels less like a toy and more like a capable speaker, as if some of the original's charm was lost in the enlarging process. On the inside, Jawbone has kept this puppy rigid without using the glass reinforcement it employed on the Jambox.

Moving around the device, up top you'll find familiar talk and volume controls and happily, Jawbone's added play / pause, advance and rewind buttons for use when streaming via Bluetooth 2.1 + EDR. Speaking of, the unit is rated for at least 33 feet of wireless functionality and we had nary an issue with the connection walking around our two-story apartment. On the right side, you'll find a glowing power button, a pairing button, and inputs for micro-USB 3.5mm cables and its power input. All of the buttons have the pleasing resistive and clicky tactile feel as the smaller version, and we're glad to see the dedicated pairing button rather than the sliding mechanism used previously and yes, a power adapter, USB cable and a 3.5mm stereo cable are included.

The cables are certainly high-quality, but we do have to wonder why Jawbone nixed the hinged prongs on the plug included with the Jambox. It's a small gripe, but it makes a huge difference when packing a bag and going portable with the device. Thankfully, the unit is rated for 15 hours of listening at "moderate levels" and 500 in standby thanks to its 2,600mAh battery, which we still have yet to drain after a weekend's worth of on and off use. Better yet, the unit will automatically turn off after a few minutes if nothing syncs to it. Disappointingly, however, you won't be able to leverage that juice (à la Braven's offerings) to charge your gizmos through the USB connection.

Setup, Software, and In-Use

Setting up the unit was incredibly easy. Upon powering it, you're greeted by a massive whoosh of sound (you'll hear a similar noise when powering down), followed by a female voice telling you the device is in pairing mode (this part only happens the first time). A quick switch over to the Bluetooth settings on our iOS and Windows Phone Mango devices quickly showed the Big Jambox and pairing took all but few seconds. We're bringing up multiple devices for a reason, too. The Big Jambox can be paired



with a whopping eight gizmos at once and stay simultaneously synced with two at a time. This allowed us to play music from an iPhone and then simply push play on a Lumia 900 to switch tracks — naturally, this could make for a terrible party, as it gives impatient listeners a surefire way to interrupt whatever jam the crowd is rocking out to. Our devices generally reconnected without fuss after shutdowns, but we did occasionally have to manually sync things back together.

It's also important to note that Jawbone cites its Jamboxes as "smartspeakers," rather than just wireless noisyboxes, and that's thanks to its MyTalk apps. Using its USB connection, you'll be able do things like customize the talk button's functionality and change the tone of the various voice prompts. You read that right: while the Jambox is devoid of any visual cues aside from its glowing power button, you'll get voice feedback for things like entering pairing mode and reminders for G-cal appointments (the Android Companion app, exclusive to the Big Jambox, is required for that last bit). You'll also hear various beeps for adjusting volume and the like.

Sadly, all iOS users get is a volume indicator, as Jawbone notes that the APIs to make a comparable iOS app are currently unavailable. Riding further on the downer train, Jawbone doesn't have any updates to share regarding Windows Phone or BlackBerry apps. However, a Jawbone rep did tell us that if there is enough of a demand the company's dev team would consider branching out.

Sound

If there's one area where we're both impressed and disappointed, it's the sound quality. On the one hand — and not surprisingly — it's extraordinarily powerful

for its size, and puts the bass reproduction of many comparable speakers to shame. Not to mention, it'll trump most of your devices' built-in speakers just as the Jambox did. Getting into the arbitrary numbers, on the inside of its airtight enclosure you'll find a duo of active neodymium drivers and dual-opposing passive bass radiators (helping the unit to stay in place while rumbling) that can roughly pump out a massive 110SPL (versus the Jambox's 85) in a loudest-case-scenario, depending on your content. Even so, it essentially suffers from the same aural flaws we came across with the little one; the high-end response is passable, distortion seeps in at the final three to four clicks of volume and music still sounds like it's trapped in a not-so-Heart-Shaped Box — all this despite Jawbone's efforts to add soundshaping algorithms such as its Live Audio technology (more on that in a moment). That distortion can vary depending on your source material, however, and Jawbone notes that it would rather have people turn down the volume than artificially tweak the audio more than necessary.

That said, according to the company, the unit employs a loudness compensation algorithm throughout the volume range to balance the highs and lows, multi-band compression that aims to kill distortion and its own blend of equalization. Mainly, the overall benefit appears to be the sheer amount of sound it could pump out through its drivers and dual-opposing passive bass radiators, rather than exceptionally rich audio quality. Of course, the unit is no doubt an improve-

ment over the little one, busting out much more volume and a fuller overall sound, but if we're being honest with ourselves, we can't say we found the quality any better than competitors like the Bose Mobile Soundlink. No matter what types of music files we used, there was always a sort-of mild low-fi veil over the sound. It becomes especially discernible once you step away from intimate placements such as having it on a desk. All in all, the lack of dedicated tweeters seems to be the main culprit for much of what we didn't like, but keeping its size in mind, we can't really knock it for not having any.

So, onto that Live Audio business. This feature was present in the original Jambox, but we'll go over it briefly for those of you who are unfamiliar. Holding down the volume up and down buttons lets you toggle the mode to "enhance" your tracks - and as you'd expect, the MyTalk voice informs you whether you've turned it on or off. Just as the moniker suggests, one of its purposes is to trick your ears into thinking you're hearing a band as you would at a live gig. In practice, it's merely okay for this scenario. While it certainly widens the soundstage and gives you the feeling that you're hearing a band over a PA system in the standing section of a concert, it also tends to bury vocals and unnaturally place subtle sounds in front of the mix (especially present with straight stereo rock 'n' roll tracks) — whether this will be positive or negative for some folks, we'd be remiss not to mention that it can soften a song's bite.

Unsurprisingly, the unit's demo mode produces sounds swaying from side to

side, but all of our efforts to achieve a similar effect never came through with music, even when using spacious songs like "Bohemian Rhapsody" or Jimmy Eat World's "Get It Faster." These gripes aside, customizable sound options would be much appreciated in the future, especially EQ tweaks for those of us using services like Google Music on Android and Zune Pass on Windows Phone. You know, considering the speaker is updatable and all.

There is much more to Live Audio than just music, though. Jawbone claims this is the first speaker to have "3D modeling." (How many times have we heard this before?) Essentially, while virtual surround sound aims to simulate speaker placements, Live

Audio works to simulate sound coming from every angle. Using *Dead Space* and *Need For Speed: Hot Pursuit*, we were able to get a better sense of what the DSP could be capable of. Switching it on gave use a more immersive soundscape with a noticeably better sense of directionality in the vein of a virtual surround sound gaming headset. However, it still comes at the cost of the sound getting a bit mushy in some areas. Ending that point, it's worth

We do need to make one thing very clear: The Big Jambox, like the original, is excellent at pushing out gobs of volume and very good sound for its size.

noting that the quality of the effect is very dependent on the source material and does seem to work best with the likes of movies and games. Jawbone's rep let us know that over a time a variety of recordings will be made with Live Audio in mind to harness its abilities better.

We do need to make one thing very clear: the Big Jambox, like the original, is excellent at pushing out gobs of volume and very good sound for its size. Our nitpicks with the sound quality are mainly to point out the limitations we found with this setup and our music library. The Big Jambox won't exactly come close to the capabilities of systems like the Klipsch G-17 Air for filing out large living rooms, but it is likely

the closest you'll get from something portable. We found that the speaker worked best in this writer's 225-square-foot home office, meaning this could be a winner among college dormers. If you've got the means to carry it along with you as well, it's more than capable as a picnic system. The sheer versatility and ease of use you'll get out of this thing more than generously makes up for any sonic shortcomings. Essentially, you can crown this the life of your moving party,



whereas the Jambox is the ticket for more personal listening and people with space-limited bags.

Speakerphone

Of course, it wouldn't be a proper review of a Jawbone product without going into details about its noise-cancellation and in-call performance. The Big Jambox differs from the little one in this respect, as it's intended for more of a conference room setting (among other scenarios, of course). While the Jambox has a front-facing mic designed to be used in front of a user, this new guy sports a top-mounted omnidirectional one to pick up sound from all angles. Jawbone also notes that it's rated as class one speakerphone, which technically places it higher than that of its sibling.

So how does it sound? As expected, the Big Jambox had noticeably better call quality on our end and on the receiving end than its little brother. While the Jambox tended to have mild cast of distortion and static, the big guy remained fairly clean and clear. Said assessment proved to ring true for the noise-cancelling microphones of both units, and we'd definitely chalk it up to the Big Jambox as the clear winner.

Wrap-Up

So, is the Big Jambox worth \$300 of your hard-earned cash? Furthermore, is that 100-dollar premium over the OG Jambox worth its weight? Aside from our concerns about the finer points of its audio fidelity, there's no mistaking how versatile this system is with the inclusion of MyTalk apps, extended Android functionality, healthy battery life and portability — not to mention that it's an extremely capable speakerphone. As it stands, the unit would



benefit from more expansive sound options, further app support for iOS and Windows Phone and the ability to share its juice with other devices.

While the \$300 price tag certainly puts it up against a bevy of other capable systems, Jawbone clearly has a standout in this supersaturated "speaker dock" crowd. Although the Big Jambox has struck a positive chord with us, there's no denying that it's lost some of the quirky cuteness that its itty bitty sibling won hearts over with — this despite the \$200 price tag, which is something to think about two years on. Basically, if you've been eyeing the Jambox but want something beefier, we'd recommend the Big Jambox without much hesitation for this type of kit. Overall, we'd say it's the d better value of the two.

Joe's functionally useless without his glasses — a fact you really shouldn't disclose to any enemies.

BOTTOMLINE

Jawbone Big Jambox

\$300

PROS

- Big sound in a small package
- Stylish and portable
- Excellent looks
- Exceptional battery life

CONS

- May distort at louder volumes
- Live Audio can be hit-or-miss

If you've been eyeing the Jambox, but crave richer audio, we'd recommend its big brother without much hesitation.



ARE'S CTO, AND BYGONE ANDROID CORE BRARY LEAD, OPENS UT A MAC PRO CHANGED HIS LIFE.

BOB LEE

Q&A

What gadget do you depend on most? Apart from my lovely wife Krista, my Nexus S is the first thing I see when I wake up and the last thing I see before I go to bed. I use it to find cool businesses, and effortlessly pay for my coffee and lunch every day (Square Card Case); email, chat and manage my contacts and schedule (Google Apps); rent cars (Uber and Zipcar); navigate the roads as well as public transit (Google Maps Navigation); track expenses (Expensify); and Inform and entertain myself while commuting (Twitter, Kindle, Pandora, and YouTube). I feel lost, not to mention bored, without it.

Which do you look back upon most fondly? I learned to program on a hand-me-down Compag Portable II "lunchbox" when I was 13. It had an 8MHz 286 CPU and an amber screen. I put my lawn mowing earnings toward a copy of Turbo Pascal 6 from a local used bookstore. Against my dad's wishes, I even got Windows 3.0 to boot with CGA graphics: when I tried to reinstall it with EGA drivers, the computer mysteriously stopped booting. I stressed about it for weeks, stomach in knots, until I finally confessed.

Dad laughed, whacked the Compag on top with his fist Fonzie-style, and much to my surprise, it booted right up. Apparently, the hard drives had a tendency to stick. I stuck to DOS after that. Life was much simpler back then.

Which company does the most to push the industry? Apple indisputably pushes computers and mobile devices the furthest. Square blazes the trail for payments. Nothing comes closer than Card Case to the ideal payment experience. You can walk into a coffee shop, order your latte, and walk out, without ever having to take your wallet or phone out of your pocket.

What is your operating system of **choice?** OS X annoys me the least.

What are your favorite gadget names? I named my Mac Pro "Kirk."

What are your least favorite? If you can't say anything nice...

Which app do you depend on most? Chrome

What is your idea of the perfect device? The computer that will store

We stand on the shoulders of so many giants. I couldn't possibly pick just one.

and execute my consciousness, enabling me to live — and innovate — forever. If we dedicate all of our resources to solving that problem first, and we succeed, we'll have unlimited time to solve every other problem. Seriously.

What is your earliest gadget memory? When my parents weren't looking, I used to brute force Leisure Suit Larry's age verification questions on our Tandy 1000. A few years back, I took a walk down memory lane, downloaded an emulator, and gave it another go. Those questions are still challenging!

What technological advancement do you most admire?



Which do you most despise? AOL. Imagine where I'd be if my parents had gotten real internet instead!

What fault are you most tolerant of in a gadget?

Size. I'm surprised by how large of a device I can comfortably fit in my pocket. I'm happy to have a larger screen and more battery life.

Which are you most intolerant of? Lack of responsiveness, especially when coupled with superfluous navigation. I find the TiVo HD and Hulu Plus on the Roku extremely frustrating, especially considering I pay monthly fees for both.

When has your smartphone been of the most help? Google Maps changed my life. Traveling abroad used to be quite a challenge, especially when I didn't know the language. Now I can navigate a foreign city almost as easily as my hometown, and I can spend my time enjoying life instead of deciphering a map. Also, Google's public transit directions have trivialized getting around San Francisco without a car, something I aspire to do as much as possible.

If you could change one thing about your phone what would it be? I'd make it behave more like the web. I'd combine the home screen, Market or App Store, and app manager. From the user's perspective, all apps are always running on Android. In the same vein, all apps should already be installed, too. I shouldn't have to explicitly install or uninstall apps. Like web applications, smartphone apps should download and install quickly and transparently the first time I run them. My data should already be automatically backed up to the cloud. If I run out of local storage, my phone can remove the local data associated with the least recently used app. It can restore the data

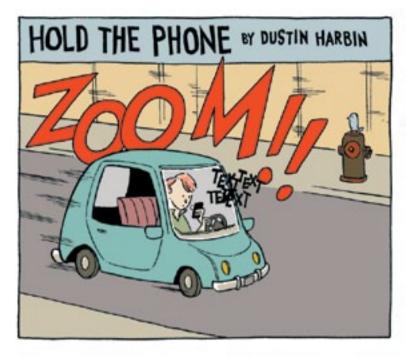
from the cloud if I run that app again.

What does being connected mean to you? I love how Facebook, Twitter, LinkedIn, et al., enable me to scale my personal and professional relationships. I wish I had these tools earlier in my life. I can stay in touch with orders of magnitude more people than I could without these tools. Humanity's success stems largely from our ability to work together — being able to collaborate more effectively will no doubt accelerate our progress.

When are you least likely to reply to an email? When the email is long and / or when the next step isn't clear. I'll star it in Gmail in the hopes of revisiting it when I have more time, but I never do.

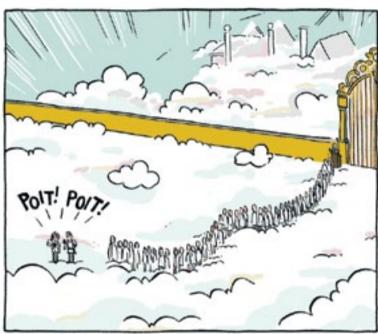
When did you last disconnect? Generally speaking, I prefer to simplify my life and reduce the number of devices I carry around and maintain. For example, I couldn't replace my iPod with a phone fast enough. The Kindle is an exception to the rule. When I try to read on my phone or computer, I'm lucky to get through one paragraph before an email or instant message distracts me. In contrast, I can plow through and finish books on my Kindle quickly, without distraction. I've even exported lengthy Gmail threads to PDF and read them on my Kindle so I wouldn't be distracted by other emails.

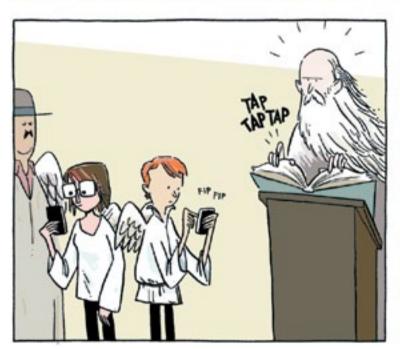
Q&A : **Bob Lee**









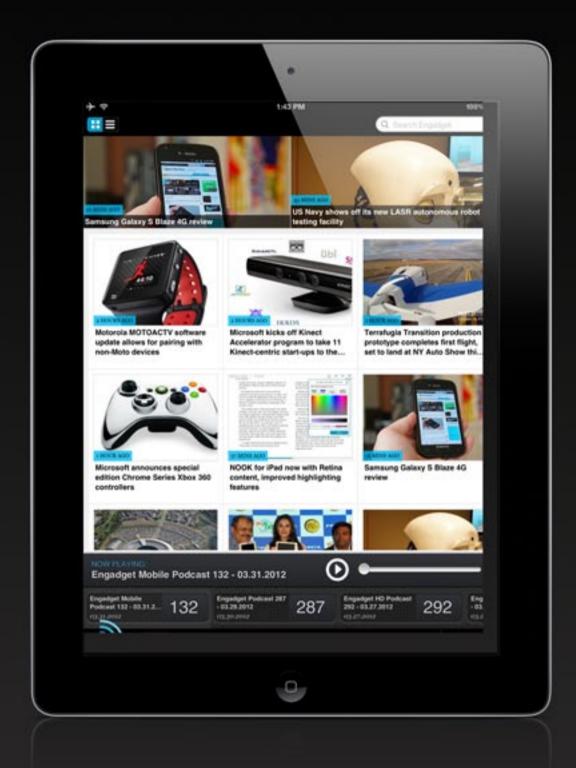




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